



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,830	03/03/2004	Kazuhiro Andoh	112388.01	2514
25944	7590	08/24/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			ROJAS, BERNARD	
			ART UNIT	PAPER NUMBER
			2832	

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/790,830	Applicant(s) ANDOH ET AL	
	Examiner Bernard Rojas	Art Unit 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06/14/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 and 15 is/are allowed.
- 6) ☒ Claim(s) 1 and 4-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 4-6 and 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krubsack et al. [US 5,021,760] in view of Okada et al. [US 5,423,117].

Claim 1, Krubsack et al. discloses an electromagnetic switch with a bobbin [52], a plate-like terminal [figures 9 and 10- 47 and 48] having a first end and a second end, the first end being attached to the bobbin in an axial direction of the bobbin [figure 7], an excitation coil [46] wound around the bobbin, an end of the excitation coil [54] being pulled out the bobbin [through 56] and connected to the terminal and wherein the

Art Unit: 2832

bobbin has a first flange and a second flange [figure 7], and the first flange has a terminal holder [57] that protrudes from the first flange in the axial direction and defines a slot on an axial end surface to receive the first end of the terminal [figure 8] and the terminal holder provides longitudinal walls protruding in the axial direction on both sides of the slot, the longitudinal walls restricting the plate-like terminal from moving in its thickness direction [figures 7 and 8, col. 9 lines 12-19], wherein the first end of the terminal has a serrated portion [60].

Krubsack et al. fails to teach the use of a cover member mounted on the terminal.

Okada et al. teaches an electromagnetic switch with a coil [12] wound on a bobbin [10] and a cover [57] mounted on the terminal [11] to protect the connection between the coil lead [12a] and the terminal [col. 2 line 67 to col. 3 line 3 and col. 3 lines 53-56], wherein terminal passes through the cover in the axial direction [figure2].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the electromagnetic switch of Krubsack et al. with a terminal cover in order to protect the solder connection of the coil lead to the terminal.

Claim 4, Krubsack et al. discloses that the terminal holder defines a slit [figures 7 and 8] to hold the excitation coil pulled out of the bobbin.

Claim 5, Krubsack et al. discloses that terminal provides an arm portion [the terminal portion 62] to fasten the end of the excitation coil [figures 9 and 10].

Claim 6, Krubsack et al. discloses that the end of the excitation coil is welded to the terminal [col. 9 lines 3-12].

Claim 8, Okada et al. discloses that the cover defines a through hole [13a] to provide the terminal pass through.

Claims 9 and 10, Okada et al. discloses that the covers [13] functions as a resilient sealing cover members 13 of electrically insulating material that are fitted on base end portions of the coil terminals. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make a separate cover member and a seal instead of an integral cover/seal member, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

Claim 11, Okada et al. discloses that the sealing member has a projection [13a] on an outer periphery.

Claim 12, Krubsack et al. discloses that the terminal holder is one of a pair of terminal holders that are located on the first flange and spaced apart from each other [figure 7].

Claim 13, Krubsack et al. discloses that the terminal holder provides a wall portion protruding in the axial direction along the terminal for restricting the terminal from moving in a thickness direction of the terminal [figures 7 and 8, col. 9 lines 12-19].

Allowable Subject Matter

Claims 14-15 are allowed.

Response to Arguments

Applicant's arguments, filed 06/14/05, with respect to claim 13 have been fully considered and are persuasive. The objection of claim 13 has been withdrawn.

Applicant's arguments with respect to claims 1, 4-6 and 8-13 have been considered but are moot in view of the new ground(s) of rejection.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Rojas whose telephone number is (571) 272-1998. The examiner can normally be reached on M-F 8-4:00), every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Br


SPE-AU2832
08/18/05